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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/750,187

12/30/2003

Kazuki Konishi

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9139

27123

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04/06/2005

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EXAMINER

KO, TONY

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/750,187

Applicant(s)

KONISHI, KAZUKI

Examiner

Tony Ko

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12, 14-20, 22-26 is/are rejected.
- 7) ☒ Claim(s) 7, 13, 21 and 27 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/29/04</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hashimoto (JP 2000-184260).
3. Regarding claims 1 and 14, Hashimoto discloses (Fig. 1) an autofocus control apparatus in an image sensing apparatus that comprises: an optical system including a focus lens (3); an image sensing unit (6) that photoelectrically converts light incident via said optical system into image signals and outputs the image signals; and a drive unit (21) that drives said focus lens to adjust a focus position, said autofocus control apparatus comprising: a floodlighting unit (30); and a focus position detector that performs focus position detection according to an active system (30) and focus position detection according to a passive system (imager autofocus) on the basis of the image signals obtained from said image sensing unit.
4. Claims 1-4, 6, 8, 14-18, 20 and 22 are rejected under U.S.C. 102(b) as being anticipated by Meyers (U.S. Patent 5,703,351)
5. Regarding claim 1-4, 6, 8, 14-18, 20 and 22, Meyers discloses (Fig. 1b) an auto control apparatus in an image sensing apparatus that comprises: an optical system including a focus lens (40, 42); an image sensing unit (44, 46) that photoelectrically

Art Unit: 2878

converts light incident via said optical system into image signals and outputs the image signals; and a drive unit (Col. 6, Line 39, motor) that drives said focus lens to adjust a focus position, said autofocus control apparatus comprising: a floodlighting unit (10); and a focus position detector that performs focus position detection according to an active system and focus position detection according to a passive system on the basis of the image signals obtained from said image sensing unit. Meyers also discloses the focus position detector, at the time of focus position detection according to the active system, acquires first image signals with said image sensing unit performing floodlighting with said floodlight unit, acquires second image signals with said image sensing unit without performing the floodlighting with a said floodlighting unit, and detects a focus position on the basis of differential signals between the first image signals and the second image signals (Col 6, Lines 15 – 25). Meyers also discloses the focus position detector, at the time of focus position detection according to the passive system, acquires image signals with said image sensing unit for a plurality of focus positions by driving said focus lens by said drive unit within a predetermined range whose center is the focus position detected on the basis of the differential signals, acquires focus states of the respective focus positions on the basis of image signals sensed at the respective positions, and detects a focus position again on the basis of the focus states. Meyers also discloses the focus position detector, at the time of focus position detection according to the active system, detects an object which has a luminance equal to or more than a predetermined size based on the differential signals, and detects a focus position on the basis of the detected object. Meyers also discloses

the first image signals are obtained from predetermined partial area of said image sensing unit, and the differential signals are of the predetermined partial area. Meyers also discloses the first image signals are of a predetermined one row or one column of said image sensing unit, and the differential signals are of the one row or one column (Fig. 1A).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 12, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyers.

8. Regarding claims 5 and 19 Meyers discloses the invention set forth above, Meyers does not disclose a focus position is detected on the basis of an object having a maximum luminance. It is well known to detect signal on the basis of an object having a maximum luminance. It would have been obvious to a person of ordinary skill in the art at the time of the invention to detect signal on the basis of an object having a maximum luminance to prevent distortion from ambient light.

9. Regarding claims 12 and 26, Meyers discloses the invention set forth above, Meyers does not disclose the use of filters. It is well known to place filters in front of detectors. It would have been obvious to a person of ordinary skill in the art at the time

Art Unit: 2878

of the invention to place filters in front of the detectors to reduce noise from ambient light and improves detection.

10. Claims 9-11 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyers in view of Hashimoto (JP 10-359666).

11. Regarding claim 9 and 23, Meyers discloses the invention set forth above, Meyers does not disclose a control unit that prohibits output of the first image signals to a display unit. Hashimoto discloses a control unit (15) and a LCD display (10). It is design choice for the control unit to prohibit output of the first image signals to a display unit. It would have been obvious to a person of ordinary skill in the art at the time of the invention to prohibit the first signal to display only visible light images for the user.

12. Regarding claim 10 and 24, Meyers discloses the invention set forth above, Meyers does not disclose a unit that controls information indicating acquisition of the first image signals, wherein said control unit controls to prohibit the output of the first image signals to said display unit according to the information. Hashimoto discloses the control unit (32) controls to prohibit the output of the first image signals to said display unit according to the information. It would have been obvious to a person of ordinary skill in the art at the time of the invention to prohibit the output of the first image signals to said display unit according to the information to efficiently process the signals.

13. Regarding claims 11 and 25, Meyers discloses the invention set forth above, Meyers does not disclose the autofocus control apparatus comprising: a first memory that stores the first image signal, and a second memory that stores the second image signals, wherein said second memory is connected to a display unit, and said first

Art Unit: 2878

memory is not connected to said display unit. Hashimoto discloses (Fig. 1) a first memory (12) that stores the first image signal, and a second memory (8) that stores the second image signals, wherein said second memory is connected to a display unit (10), and said first memory is not connected to said display unit. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a first memory that stores the first image signal, and a second memory that stores the second image signals, wherein said second memory is connected to a display unit, and said first memory is not connected to said display unit to efficiently process the signals.

Allowable Subject Matter

14. Claims 7, 13, 21 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter: Prior art discloses the invention set forth above, prior art does not disclose prior to the detection of the focus position, adds differential signals of the predetermined partial area in a predetermined direction to acquire one-dimensional added differential signals, and detects the focus position on the basis of the added differential signals. Prior does not disclose image signals outputted from the image sensing unit are corrected to acquire the first image signals according to sensitivity of each color element of said color separation filter with respect to an in an infrared ray.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Ko whose telephone number is 571-272-1926. The examiner can normally be reached on Monday-Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TKO


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